

RUSIP: AN AUTHENTIC FISH FERMENTED PRODUCT FROM BANGKA BELITUNG ISLAND, INDONESIA

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ABSTRACT

*The acculturation in Bangka Belitung Island has affected many traditional aspects, including foods. Rusip is a traditional fermented food from Bangka Belitung Island, which is made of anchovy (*Stolephorus* sp) or known as bilis fish, palm sugar, and salt. This study is conducted to gain knowledge, about the impacts of several ethnics in rusip making and its history in Bangka Belitung Island. In general, Rusip is made by mixing the bilis fish with 7% (w/w) of salt and 5% (w/w) of palm sugar, and then, it is stored in an anaerobic condition. Rusip was originally made to preserve fish from microbial decay. The abundant amount of perishable fish during fishing time and limitation of transportation in centuries ago have led a simple fermentation technique became a solution for preserving the fish. Bilis fish were used as the main ingredient of rusip due to its abundance in coastal area. The use of palm sugar is influenced by Javanese culture. Arrack is used as additional ingredients of rusip, by The Chinese, while Malay is prohibited, due to their beliefs. Rusip can be consumed raw as condiment or cooked as mixture, for sambal and considered as an appetite stimulant, by the people of Bangka Belitung Island.*

KEYWORD *Bangka Belitung Island, Culture & Rusip*

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INTRODUCTION

Seafood raw material such as fish has an extremely short shelf life. Fermentation is one of preservation techniques used by Indonesian people to extend shelf life. Various food products of fermented fish in Indonesia which is categorized as traditional food are peda and terasi from Yogyakarta, pakasam from Banjarmasin, pindang from Java, rusip from Bangka Belitung Island, and many more [1]. Rusip is a fermented fish product commonly made from small fish like anchovy (*Stolephorus* sp) or also known as bilis fish, by the local resident of Bangka Belitung Island [2]. It is usually made in a small scale at home during the fish peak season, by fermenting with salt and palm sugar, then stored for anaerobic fermentation for about a week or more.

Based on the customization of local resident in Bangka Belitung Island, rusip usually consumed as a mixture for sambal, either through cooking process or directly consumed as side dish without cooking. Rusip processing for consumption can be done with the addition of onion, chili and citrus juice. Physically, the appearance of rusip shows gray and brown in color. The physical solids of bilis fish began to crumble, murky, and dilute through fermentation. Rusip will release the aroma of fishy and sour as a characteristic of fermented fish products, while it tastes salty and sour [2]. Bangka Belitung Island's culinary including rusip as already acculturated by many culture such as Chinese, Malay, Europe, Japan, Java, and others. Therefore, the research of

rusip needs to be done, to gain deeper information about its history and the impact of cultural influence on rusip.

METHODS OF MAKING RUSIP

The main ingredients of making *rusip* are *bilis* fish, palm sugar, and coarse salt [3]. Based on a review from Neti Yuliana (2017) [2], the initial process of making *rusip* is, by washing *bilis* fish with water until cleaned (figure 1). Some of *rusip* production in home industry, firstly remove the *bilis* fish' head before washing for aesthetic reason, and to eliminate the bitter taste of the head, then drain it up (figure 2). Next, the *bilis* fish is weighed to then prepare an amount of 7% (w/w) of salt and 5% (w/w) of crushed palm sugar to be added (figure 3). Some of *rusip* home industry use 10% (w/v) of liquid palm sugar. The addition of 3% arrack was used by the Chinese. The composites are then mixed and placed into an anaerobic space (figure 5). The production area has to be cleared from flies and other animals to prevent contamination. During the fermenting, make sure the containers are completely sealed so there is no contamination. Let those composites be fermented in an anaerobic condition for 7 days until it becomes a food called *rusip*. In earlier times, *rusip* was fermented inside a small traditional jar called *guci*[4]. The general process of making *rusip* by Koesoemawardani et al. (2016) [5] is shown on **Figure 6**



Figure 1: Removing Bilis' Head and Washing Process



Figure 2: Draining of Bilis Fish



Figure 3: 7% Salt and 5% of Palm Sugar



Figure 4: Mixing Process



Figure 5: Composites Were Stored in Anaerobic Condition During Fermentation

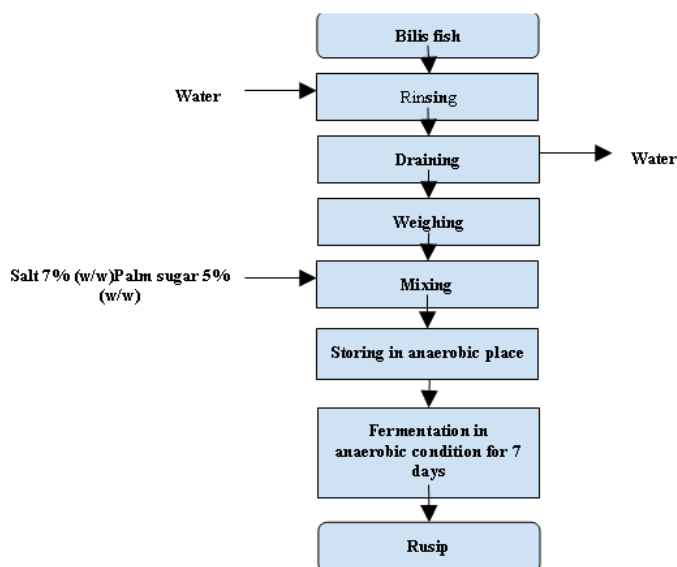


Figure 6: General Rusip Making Process

RESULT AND DISCUSSIONS

Rusip and its Consumption

Rusip is a traditional food from Bangka Belitung Island, Indonesia. Rusip has a very unique and distinct flavor, due to the fermentation. Rusip is made of bilis fish, which is abundant in Bangka Belitung Island, added with palm sugar and salt. The palm sugar is used as an energy and nutrition for bacteria to grow during fermentation. The palm sugar liquid is made at 100°C for 5 minutes so it would reduce the total mold in rusip[3]. Based on observation that conducted in Bangka Belitung Island on October 2017, approximately 3% arrack were used by the Chinese before fermentation in order to reduce the fishy aroma and better flavor improvements. In other hand, arrack is also used to quicken the fermentation because it has. Rusip is similar to kecalok and pekasam, but differs in the main ingredients used. Rusip is made of anchovy or bilis fish, kecalok is made of acetes, while pekasam is made of larger fish or clam. Rusip is the most popular dish, among these three fermented foods. In Bangka Belitung Island's culture, rusip is usually used as sambal, which is spicy condiment and can be consumed with rice and vegetables [6].

In an interview with Titien Dharmaputra, a culinary expert, instructor of cooking course, and author of various culinary books, she explained that Rusip has a mix flavor between sour, savory, and spicy. The sour flavor comes from the citrus and the acid produced by the fermentation. The savory flavor comes from the salt, while the spicy flavor comes from the chili. Rusip has an incisive sour smell and appearance, which might be unappealing for many people. The smell of rusip can be partially masked by the addition of citrus juice, usually using jeruk kunci, which is abundant in Bangka Belitung Island. Dharmaputra said that rusip is a fermented food, which does not undergo any cooking process. Rusip is usually eaten raw by adding citrus juice. However, rusip can be mixed with other ingredients such as shallot, garlic, chilli, lemongrass, tomato, and/or bilimbi and cooked by stir-fry method before serving.

In an interview with Adi A. S, a humanist and food expert from Bangka Belitung Island, he mentioned that rusip is a Bangka Belitung Island traditional food that has become less popular in the last decade. However, rusip is still consumed as everyday food by some people in Bangka Belitung Island. The people of Bangka Belitung Island considered rusip as an appetite stimulant, due to its unique flavor.

Rusip as a dipping sauce or side dish is served to eat with water spinach, yard long bean, pucuk cassava, eggplant or cucumber. Rusip is also known to be sold as merchandise, packed in a bottle from small to big size.

The History of Rusip

Bangka Belitung Island is an archipelago province; therefore most of its traditional foods are made of seafood such as fish, shrimp, and squid. Decades ago, the livelihood of Bangka Belitung Island people were dominated by three sectors, mine, farm, and marine. The main commodity of marine in Bangka Belitung Island is fish. During the fishing season, fish were abundant and very cheap. Fish have high level of moisture and water activity which makes it prone to microbial decay, meanwhile the fish could not be distributed quickly due to the unavailability of modern transportations. People needed to find a way to preserve the fish long enough before it becomes rotten and to keep the fish until fishing season ends. Therefore, rusip was made by using the ancient fermentation technique. Bilis fish were used for rusip, due to their abundant availability in the coastal area. In addition of the abundant amount of bilis fish, the limitation of water transportation in earlier time made most people were unable to catch bigger fish in open sea. Small size fish such as anchovy or bilis is fermented in a jar or bottle with the addition of salt, palm sugar, and other seasoning for a week or two weeks to make rusip. The fermentation process applied to make rusip is a traditional and spontaneous fermentation without the addition of pure culture of microorganism which results to the variation of organoleptic quality [7].

The modern transportation and preservation technologies allow people to distribute and store fish without fermentation. Water pollution as a result of the mining activities had reduced the production of captured fish and led fish availability in the present time become less abundant compared to decades ago [8]. High demand and price of the raw fish made people prefer to sell fish directly instead of making it into rusip, therefore rusip production has been decreased during the last decade. The function of rusip making has been changed, rusip is no longer produced to preserve fish, and moreover, rusip has become Bangka Belitung Island traditional food that is usually served in special occasion. Rusip is sold in gift shop as a food souvenir from Bangka Belitung Island.

The Culture Influencing Rusip

Bangka Belitung Island is a province located in the southeastern coast of Sumatra. It consisted of two main island, Bangka and Belitung. Bangka and Belitung Island originally inhabited by Orang Laut or literally translated as Sea Peoples from various places, such as Sulawesi, Kalimantan, Malay, China, Java, and North Sumatra. Nowadays, there are two largest ethnic groups living in Bangka and Belitung, which are Malay and Chinese. This diversity makes Bangka and Belitung rich in culture, including food. Some of Bangka Belitung Island traditional foods are lempah kuning, balacan, kericu, kemplang, bintang cake, sambal lingkong lakso, pantiauw, rusip, kecalok, and tai fu sui.

Rusip is a product of culture mixed between several civilizations, including Bangka Belitung Island, Javanese, and Chinese. It is possible that rusip is influenced by other civilizations due to acculturation in Bangka Belitung Island. The Javanese culture influenced rusip through the use of palm sugar (gula jawa), which is originally from Java. Palm sugar is commonly known as gula kabung in Bangka Belitung Island. According to an interview with Hera Riastiana, an anthropologist and officer of Bangka Belitung Department of Culture and Tourism, specialized in History and Tradition, Javanese culture entered Bangka Belitung Island when Majapahit expanded its kingdom to Bangka Belitung Island before 16th century. Majapahit entrance brought several customs, including the use of palm sugar in many foods. Palm sugar is used in rusip making, to enhance the flavor and to be as the source of carbon for fermenting microbes.

Chinese is the second largest ethnic in Bangka Belitung Island. In the 15th centuries, a small number of Chinese came to Bangka Belitung Island as traders. The arrival of massive numbers of Chinese in Bangka Belitung began when Chinese were hired as expert workers for tin mining by Encek Wan Akub and Dutch Colonial [9]. Riastiana mentioned that Chinese were brought by Encek Wan Abdul Jabbar from Johor, Malaysia for tin mining. Some of The Chinese decided to stay in Bangka Belitung Island and married with local people. Chinese culture affects rusip, through the use of arrack. Arrack is an alcohol beverage which widely used by the Chinese. Arrack is made by distilling fermented sugarcane, rice, or red rice. The Chinese usually use arrack for praying ceremonies, drinking in celebrations or special events, cooking, and also as a medicine. The Chinese of Bangka Belitung Island usually add arrack into the rusip, to decrease the smelly aroma of fish and enhance the flavor. However, arrack is considered as haram and cannot be consumed by Moslem due to its intoxicating characteristics. Malay is the largest ethnics in Bangka Belitung Island. Most of Malays are Moslem, which makes Moslem became a dominant religion in Bangka Belitung Island. The prohibition of arrack consumption in moslem made most of rusip in Bangka Belitung Island are fermented without the addition of arrack. In an interview with rusip maker from Bangka Belitung, there are two kinds of rusip which are popular in Bangka Belitung Island, Chinese style rusip with the addition of arrack and Malay style rusip without the addition of arrack. In several regions that mostly inhabited by Chinese, such as Sungailiat, almost all rusip are made in Chinese style, while in regions such as Muntok that mostly inhabited by Malay, the Chinese style rusip can hardly be found.

CONCLUSIONS

Rusip has become a part of culture in Bangka Belitung Island. Although there is no specific history about rusip, in Bangka Belitung Island, people of Bangka Belitung has considered rusip as their authentic food and as their everyday foods. Rusip is originally made to preserve fish during the fishing season in Bangka Belitung Island, due to the limitation of distribution and storage methods in the previous time. The acculturation of several cultures that inhabit Bangka Belitung Island has given influences in the making process of rusip. Javanese culture affects rusip, through the use of palm sugar or gula jawa, while Chinese culture affects rusip, through the use of arrack. In Malay culture, the rusip is made, without the addition of arrack due to the religious ban.

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